



**48V DC Input Industrial PC PS2
ATX Form Factor
FANLESS
Switching Mode Power Supply**

Series	Model No.	Output Watts	Input Voltage	Input Voltage range
48	STC-48300M	300W continuous	±48V DC	±37V ~ ±72V DC
	STC-48250M	250W continuous	±48V DC	±37V ~ ±72V DC
	STC-48150M	150W continuous	±48V DC	±37V ~ ±72V DC

ENVIRONMENTAL CONDITIONS:

- ▶ Cooling: Convection cooling
- ▶ Operating Temperature: -10°C~+55°C (Full Load)
- ▶ Operating Humidity: 20%~90% RH. (Non condensing)
- ▶ Storage Temperature: -20°C~+95°C
- ▶ Storage Humidity: 10%~90% RH. (Non condensing)
- ▶ Operating Altitude: 10M Below Sea level to 3000M Above Sea level

DC INPUT CHARACTERISTICS:

- ▶ Input connector type 30A/300V UL Approved Gold Plated Brass 1.2t/3-pin Terminal
- ▶ Input Current 5.2A/10.4A(300W) 4.3A/8.6A(250W) 2.6A/5.2A(150W)
@ Full Load High Line & Low Line
- ▶ Inrush Current Less than 50A Cold start @25°C ambient

DC OUTPUT CHARACTERISTICS:

Output Voltage	Regulation			Output Current						Ripple & Noise
	Load	Line	Cross	300W		250W		150W		
				Min	Max	Min	Max	Min	Max	
+5V	±5%	±1%	±5%	1.5A	30A	1.5A	15A	1.5A	15A	50mV
+12V				0.2A	20A	0.2A	14A	0.2A	9A	120mV
+3.3V				0A	15A	0A	7A	0A	5A	50mV
-5V								0A	1A	50mV
-12V	±8%			0A	0.8A	0A	0.5A	0A	0.5A	120mV
+5VSB	±5%			0A	3A	0A	2A	0A	2A	50mV
Maximum continuous combined load on +3.3 V & +5V DC output shall not exceed				150		150		90		Wattage
Maximum continuous combined load on +3.3 V & +5V & 12V DC output shall not exceed				270		220		120		
Maximum continuous total DC output power shall not exceed				300		250		150		

OVERALL PERFORMANCE:

- ▶ Efficiency: 75% typical @ 48V DC Full Load
- ▶ Hold up time:
- ▶ Rise time:
- ▶ Power Good Signal: TTL Compatible signal, on delay 100~500ms, off delay 1ms min.
- ▶ Short Circuit Protection (SCP): All output equipped with SCP (shutdown and latch off)

- ▶ Over Power Protection (OPP): Peak power protected to 130%±10% of continuous rated power (shutdown and latch off)
- ▶ Over Voltage Protection (OVP): +3.3V@4.5V, +5V@6V, +12V@15.6V

RELIABILITY:

- ▶ MTBF: 100,000 hours @max. Load, 48V DC & 25°C ambient
- ▶ Safety Standards: Meet IEC60950-1, EN60950-1
- ▶ Safety Approved:
- ▶ EMI Compatibility (EMC): EN55032:2015/AC:2016, CISPR32:2015, EN61000-3-2:2014, EN61000-3-3:2013, EN55024:2010 +A1:2015

ISOLATION:

- ▶ INPUT and OUTPUT are isolated by transformers and optical couplers
- ▶ Dielectric Withstand: INPUT to OUTPUT: 1000V DC for 60 seconds
- ▶ Dielectric Withstand: INPUT to FRAME GROUND: 1000V DC for 60 seconds
- ▶ Leakage Current: <0.005µA @ 48V DC

Output Device Connector Specific:

ATX 24 Pins x 1	Molex 29-01-2240 or equivalent
12V(P4) 4 Pins x 1	Molex 39-01-2040 or equivalent
HDD, DVD 4Pin x 4	Molex 8981-04P or equivalent
FDD 4 Pin x 1	AMP 171822-4 or equivalent
Serial ATA x 2	Molex 675820000 or equivalent
Process EPS 8 Pins x 1	Molex 39-01-2080 or equivalent
PCIe 8(6+2) Pin x 1	

Standard Output Cable Length:

520 mm / 20.47 inches

Power Chassis Dimension:

300W: 184(L) x 150(W) x 86(H) mm / 7.24(L) x 5.9(W) x 3.38(H) inches
250W: 170(L) x 150(W) x 86(H) mm / 6.69(L) x 5.9(W) x 3.38(H) inches
150W: 140(L) x 150(W) x 86(H) mm / 5.51(L) x 5.9(W) x 3.38(H) inches

Net Weight:

250W: 2.5 kg / 5.51 Lbs
150W: 2.3 kg / 5.07 Lbs

Gross Weight:

250W: 3.5 kg / 7.71 Lbs
150W: 2.5 kg / 5.51 Lbs

Packing Detail:

250W: 6 pcs
150W: 8 pcs

Measurement of Carton:

0.046 m³ / 1.61 Cuft